

Anti-alpha 1 Antitrypsin antibody [EPR17087-50] ab207303

重组 RabMAb

★★★★★ **2 Abreviews** **9 References** **8 图像**

概述

产品名称	Anti-alpha 1 Antitrypsin抗体[EPR17087-50]
描述	兔单克隆抗体[EPR17087-50] to alpha 1 Antitrypsin
宿主	Rabbit
经测试应用	适用于: IHC-P, WB, IP, ICC/IF
种属反应性	与反应: Human
免疫原	Full length native protein (purified) corresponding to Human alpha 1 Antitrypsin. Database link: P01009
阳性对照	WB: Human liver, heart, kidney, spleen and fetal liver lysates. IHC-P: Human hepatocellular carcinoma and liver tissues. ICC/IF: HepG2 and K562 cells. IP: HepG2 whole cell lysate.
常规说明	This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information see here . Our RabMAb [®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents .

性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
存储溶液	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: PBS, 0.05% BSA, 40% Glycerol (glycerin, glycerine)
纯度	Protein A purified
克隆	单克隆
克隆编号	EPR17087-50

同种型

IgG

应用

The Abpromise guarantee

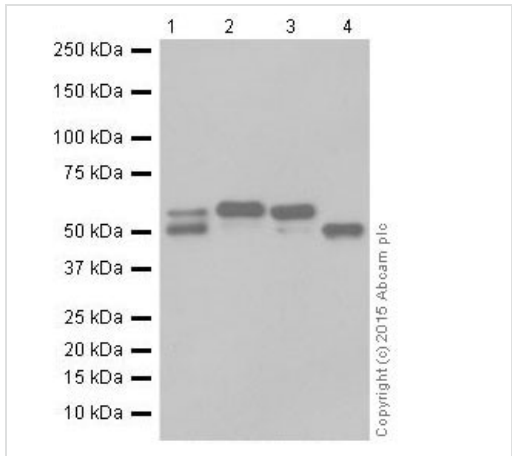
Abpromise™承诺保证使用ab207303于以下的经测试应用

“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
IHC-P	★★★★★ (2)	1/400. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
WB		1/5000. Detects a band of approximately 51, 55 kDa (predicted molecular weight: 46 kDa).
IP		1/20.
ICC/IF		1/50.

靶标

功能	<p>Inhibitor of serine proteases. Its primary target is elastase, but it also has a moderate affinity for plasmin and thrombin. Irreversibly inhibits trypsin, chymotrypsin and plasminogen activator. The aberrant form inhibits insulin-induced NO synthesis in platelets, decreases coagulation time and has proteolytic activity against insulin and plasmin.</p> <p>Short peptide from AAT: reversible chymotrypsin inhibitor. It also inhibits elastase, but not trypsin. Its major physiological function is the protection of the lower respiratory tract against proteolytic destruction by human leukocyte elastase (HLE).</p>
组织特异性	Ubiquitous. Expressed in leukocytes and plasma.
疾病相关	Alpha-1-antitrypsin deficiency
序列相似性	Belongs to the serpin family.
结构域	<p>The reactive center loop (RCL) extends out from the body of the protein and directs binding to the target protease. The protease cleaves the serpin at the reactive site within the RCL, establishing a covalent linkage between the carboxyl group of the serpin reactive site and the serine hydroxyl of the protease. The resulting inactive serpin-protease complex is highly stable.</p>
翻译后修饰	<p>N-glycosylated. Differential glycosylation produces a number of isoforms. N-linked glycan at Asn-107 is alternatively di-antennary, tri-antennary or tetra-antennary. The glycan at Asn-70 is di-antennary with trace amounts of tri-antennary. Glycan at Asn-271 is exclusively di-antennary. Structure of glycans at Asn-70 and Asn-271 is Hex5HexNAc4. The structure of the antennae is Neu5Ac(alpha1-6)Gal(beta1-4)GlcNAc attached to the core structure Man(alpha1-6)[Man(alpha1-3)]Man(beta1-4)GlcNAc(beta1-4)GlcNAc. Some antennae are fucosylated, which forms a Lewis-X determinant.</p> <p>Proteolytic processing may yield the truncated form that ranges from Asp-30 to Lys-418.</p>
细胞定位	Secreted. Endoplasmic reticulum. The S and Z allele are not secreted effectively and accumulate intracellularly in the endoplasmic reticulum and Secreted, extracellular space, extracellular matrix.



Western blot - Anti-alpha 1 Antitrypsin antibody [EPR17087-50] (ab207303)

All lanes : Anti-alpha 1 Antitrypsin antibody [EPR17087-50] (ab207303) at 1/5000 dilution

Lane 1 : Human liver lysate

Lane 2 : Human heart lysate

Lane 3 : Human kidney lysate

Lane 4 : Human spleen lysate

Lysates/proteins at 20 µg per lane.

Secondary

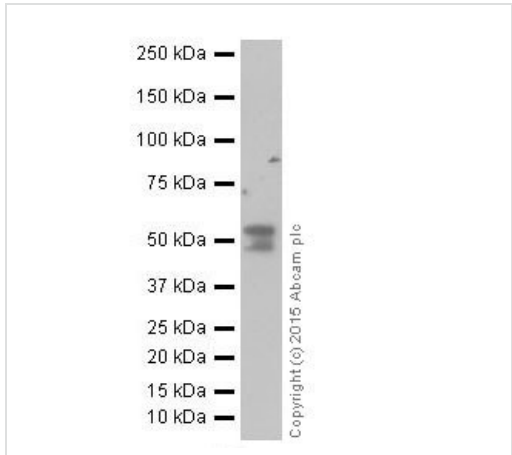
All lanes : Goat Anti-Rabbit IgG Peroxidase Conjugate, specific to the non-reduced form of IgG at 1/10000 dilution

Predicted band size: 46 kDa

Observed band size: 51,55 kDa

Exposure time: 1 minute

Blocking/Dilution buffer: 5% NFDM/TBST.



Western blot - Anti-alpha 1 Antitrypsin antibody [EPR17087-50] (ab207303)

Anti-alpha 1 Antitrypsin antibody [EPR17087-50] (ab207303) at 1/5000 dilution + Human fetal liver lysate at 10 µg

Secondary

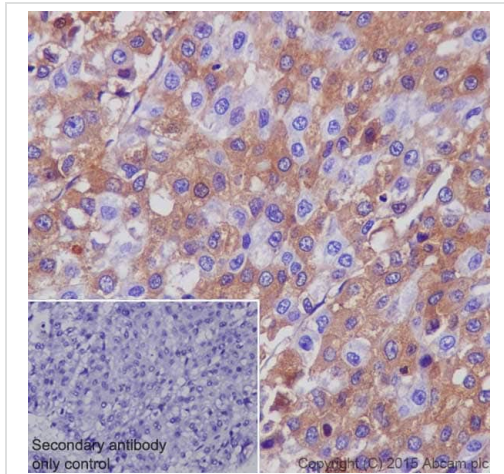
Goat Anti-Rabbit IgG Peroxidase Conjugate, specific to the non-reduced form of IgG. at 1/10000 dilution

Predicted band size: 46 kDa

Observed band size: 51,55 kDa

Exposure time: 1 minute

Blocking/Dilution buffer: 5% NFDM/TBST.

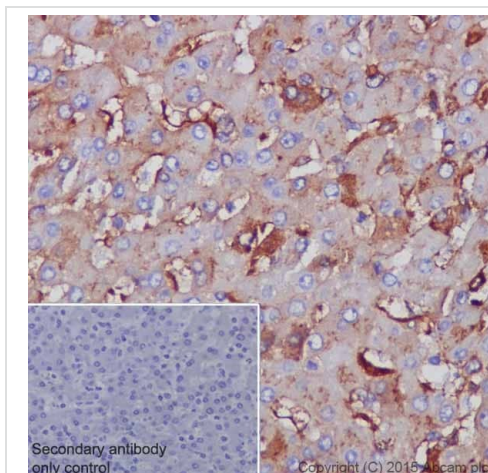


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-alpha 1 Antitrypsin antibody [EPR17087-50] (ab207303)

Immunohistochemical analysis of paraffin-embedded human hepatocellular carcinoma tissue labeling alpha 1 Antitrypsin with ab207303 at 1/400 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/500 dilution. Cytoplasmic staining on cancer cells of human hepatocellular carcinoma is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

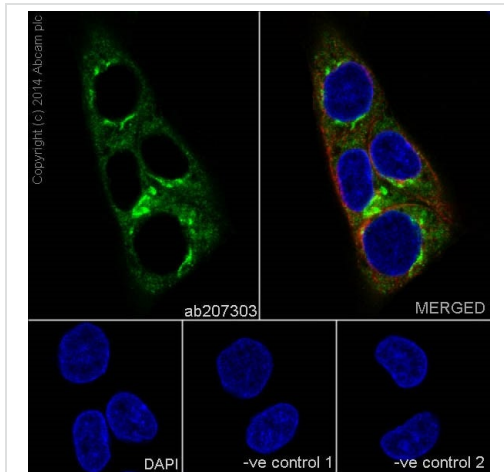


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-alpha 1 Antitrypsin antibody [EPR17087-50] (ab207303)

Immunohistochemical analysis of paraffin-embedded human liver tissue labeling alpha 1 Antitrypsin with ab207303 at 1/400 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/500 dilution. Cytoplasmic staining on human liver is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



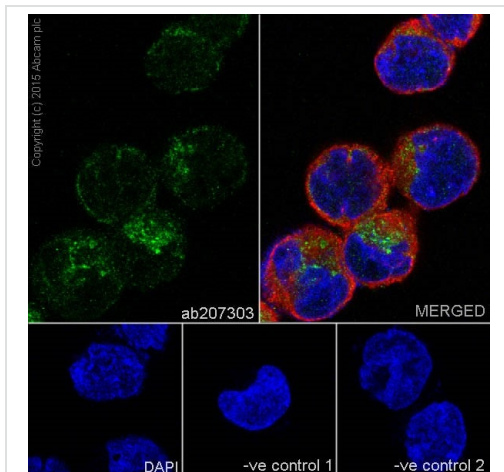
Immunocytochemistry/ Immunofluorescence - Anti-alpha 1 Antitrypsin antibody [EPR17087-50] (ab207303)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HepG2 (Human liver hepatocellular carcinoma) cells labeling alpha 1 Antitrypsin with ab207303 at 1/50 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green). Confocal image showing cytoplasmic staining on HepG2 cell line. The nuclear counter stain is DAPI (blue). Tubulin is detected with Anti-alpha Tubulin mouse mAb (**ab7291**) at 1/1000 dilution, followed by Goat Anti-Mouse Alexa Fluor® 594 (**ab150120**) secondary antibody at 1/1000 dilution (red).

The negative controls are as follows:

-ve control 1: ab207303 at 1/50 dilution, followed by Goat Anti-Mouse Alexa Fluor® 594 (**ab150120**) secondary antibody at 1/1000 dilution.

-ve control 2: Anti-alpha Tubulin mouse mAb (**ab7291**) at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution.



Immunocytochemistry/ Immunofluorescence - Anti-alpha 1 Antitrypsin antibody [EPR17087-50] (ab207303)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized K562 (Human chronic myelogenous leukemia cells from bone marrow) cells labeling alpha 1 Antitrypsin with ab207303 at 1/50 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green). Confocal image showing cytoplasmic staining on K562 cell line. The nuclear counter stain is DAPI (blue).

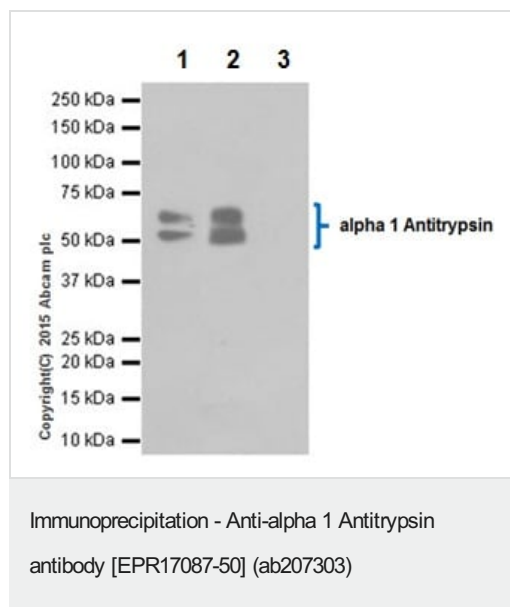
Tubulin is detected with Anti-alpha Tubulin mouse mAb (**ab7291**) at 1/1000 dilution, followed by Goat Anti-Mouse IgG H&L (Alexa Fluor® 594) (**ab150120**) secondary at 1/1000 dilution (red).

The negative controls are as follows:

-ve control 1: ab207303 at 1/50 dilution followed by Goat Anti-Mouse IgG H&L (Alexa Fluor® 594) (**ab150120**) secondary at 1/1000 dilution.

-ve control 2: Anti-alpha Tubulin mouse mAb (**ab7291**) at 1/1000 dilution followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488)

([ab150077](#)) at 1/1000 dilution.



alpha 1 Antitrypsin was immunoprecipitated from 1 mg of HepG2 (Human liver hepatocellular carcinoma) whole cell lysate with ab207303 at 1/20 dilution. Western blot was performed from the immunoprecipitate using ab207303 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) ([ab131366](#)), was used for detection at 1/10000 dilution.

Lane 1: HepG2 whole cell lysate 10ug (Input).

Lane 2: ab207303 IP in HepG2 whole cell lysate.

Lane 3: Rabbit monoclonal IgG ([ab172730](#)) instead of ab207303 in HepG2 whole cell lysate.

Blocking and dilution buffer and concentration: 5% NFDm/TBST.

Exposure time: 3 seconds.

Why choose a recombinant antibody?

Research with confidence
Consistent and reproducible results

Long-term and scalable supply
Recombinant technology

Success from the first experiment
Confirmed specificity

Ethical standards compliant
Animal-free production

Anti-alpha 1 Antitrypsin antibody [EPR17087-50] (ab207303)

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